

IN THE CLAIMS

1-8 (Cancelled)

9 (New): A method for removing fructosyl group from a fructosylated peptide or a fructosylated protein, comprising:

reacting the fructosylated peptide or protein with an isolated enzyme obtainable from a plant that removes fructose from a peptide or polypeptide without removing an amino acid residue of said peptide or polypeptide.

10 (New): The method of Claim 9, wherein said enzyme may be obtained from a plant belonging to the family *Rosaceae*.

11 (New): The method of Claim 9, wherein said enzyme may be obtained from a plant belonging to the family *Rosaceae* selected from the group consisting of *Malus*, *Pyrus pyrifolia*, *Prunus persica* and *Prunus mume*.

12 (New): The method of Claim 9, wherein said enzyme may be obtained from a plant belonging to the family *Vitaceae*.

13 (New): The method of Claim 9, wherein said enzyme may be obtained from a plant belonging to the family *Vitaceae* selected from the group consisting of *Vitis vinifera* and *Parthenocissus tricuspidata*.

14 (New): The method of Claim 9, wherein said enzyme may be obtained from a plant belonging to the family *Umbelliferae*.

15 (New): The method of Claim 9, wherein said enzyme may be obtained from a plant belonging to the family *Umbelliferae* selected from the group consisting of *Daucus carota*, *Oenanthe javanica* and *Cryptotaenia japonica*.

16 (New): The method of Claim 9, wherein said enzyme removes an N-terminal fructosyl group from a fructosylated peptide or fructosylated protein comprising Val-His (SEQ ID NO: 1).

17 (New): The method of Claim 9, wherein said enzyme removes an N-terminal fructosyl group from a fructosylated peptide or fructosylated protein comprising Val-His-Leu (SEQ ID NO: 2).

18 (New): The method of Claim 9, wherein said enzyme removes an N-terminal fructosyl group from a fructosylated peptide or fructosylated protein comprising Val-His-Leu-Thr (SEQ ID NO: 3).

19 (New): The method of Claim 9, wherein said enzyme removes an N-terminal fructosyl group from a fructosylated peptide or fructosylated protein comprising Val-His-Leu-Thr-Pro (SEQ ID NO: 4).

20 (New): The method of Claim 9, wherein said enzyme removes an N-terminal fructosyl group from a fructosylated peptide or fructosylated protein comprising Val-His-His-Leu-Thr-Pro (SEQ ID NO: 5).

21 (New): The method of Claim 9, wherein the fructosylated protein is hemoglobin A1c.

22 (New): The method of Claim 9, further comprising detecting at least one reaction product of removal of a fructosyl group from said fructosylated peptide or fructosylated protein.

23 (New): The method of Claim 22, comprising detecting the reaction product hydrogen peroxide.

24 (New): The method of Claim 22, comprising detecting the reaction product glucosone.

25 (New): The method of Claim 22, comprising detecting the reaction product glucose.

26 (New): The method of Claim 22, comprising detecting the reaction product defructosyl peptide.

27 (New): An isolated enzyme having the ability to remove a fructosyl group from a fructosylated peptide or a fructosylated protein, without removing an amino acid residue of said peptide or protein, which can be isolated from a plant.

28 (New): The isolated enzyme of Claim 27, which is isolated from a plant belonging to the family *Rosaceae*.

29 (New): The isolated enzyme of Claim 27, which is isolated from a plant belonging to the family *Vitaceae*.

30 (New): The isolated enzyme of Claim 27, which is isolated from a plant belonging to the family *Umbelliferae*.